Talk Guidelines for IC's for data transmission

Must data transmission be necessarily optical? Under what conditions is electrical transmission more suitable or equally capable? How about wireless/free space?

Only integrated circuits should be covered. Electrical to optical transducers are outside the scope. The types of transducers likely to be favored in the next 10 years should just be listed to give requirements on driver IC's.

The main question is, as a function of time, what will be available off-the-shelf from industry and what must be developed? Include expected international development, not only US.

For needed development, what is already being done? Why is something else needed?

What processes should new development use and why?

What is the expected useful shelf life (before they become obsolete) of custom chips developed in this area?